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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,036	10/02/2003	Denis Thiot	003-088	6916
36844	7590	05/10/2005	EXAMINER	
CERMAK & KENEALY LLP 515 E. BRADDOCK RD ALEXANDRIA, VA 22314			PHAN, THIEM D	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/676,036	THIOT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tim Phan	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 05 April 2005.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-25 is/are pending in the application.  
 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 11-22 and 24 is/are rejected.  
 7) Claim(s) 23 and 25 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 3/5/04
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicants' election without traverse of Group II, Claims 11-25, filed on 4/05/05, is acknowledged.

The Restriction mailed on 1/27/05 has been carefully reviewed and is held to be proper. Moreover Applicants did not distinctly and specifically point out any error in the Restriction Requirement. Accordingly, Claims 1-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group, there being no allowable generic or linking claim.

The Restriction filed on 1/27/05 is hereby **made Final**.

Applicants are required to cancel these nonelected claims (1-10) or take other appropriate action.

An Office Action on the merits of Claims 11-25 now follows.

### ***Specification***

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

#### **Title**

The following title is suggested: "A Method of Mounting an Armature Bar".

#### **Cross Reference**

On page 1, before "BACKGROUND OF THE INVENTION", insert:

"CROSS REFERENCE TO RELATED DOCUMENT

This application claims priority to United Kingdom Application No. 0223487.0, filed on October 9, 2001.".

### **Abstract**

Applicants are reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the **range of 50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Currently, the wording "(Fig. 1)" is meaningless.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hiroshi et al(JP 10-094205) hereinafter '205 in view of Lonseth et al (US 4,110,900) hereinafter '900 or vice versa.

**As applied to claim 11, the '205 teaches, as an old art, a process of cooling the coil of a rotating electric machine by inserting a lateral ripple spring sheet (Fig. 8, 9) between the bar (Fig. 8, 1) and the core (Fig. 8, 7) to tightly couple the bar to the slot and fix vibrational problem, with the motivation of using metallic material and resin (Fig. 4, 14) to fill the side bar slot.**

The '900 teaches a method of manufacturing a dynamoelectric machine by:

- providing a flowable precursor of a conformable material or resin (Fig. 3, 45; col. 5, lines 30-31) in a void space between one side surface of the bar (Fig. 3, 17) and the corresponding side surface of the slot (Fig. 3, 15) so that the precursor fills the void space; and
- allowing the precursor to cure (Col. 7, lines 20-24) to form the conformable material in the void space so as to reduce the thermal and electrical resistance (Col. 7, lines 37-38) between the bar and the core, in order to reduce the phenomenon of corona discharge in the machine.

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings by applying the resin to a spring sheet dotted with holes or several spring sheets spacially inserted in the side bar slot, in order to fix vibrational problem and reduce the phenomenon of corona discharge in the machine.

**As applied to claims 12 and 13,** the '205 and '900 teach a process of making dynamoelectric machine, except for providing a layer of precursor or resin on one side surface of the bar or slot before the bar is positioned in the slot.

It is mere matter of design choice to provide a layer of precursor or resin on one side surface of the bar or slot before the bar is positioned in the slot and it appears that the invention would perform equally well with the precursor or resin injected while the bar is in the slot (Fig. 3, 45).

**As applied to claim 14,** the '205 and '900 teach a process of making dynamoelectric machine by inserting the spring in the side bar slot ('205, Fig. 8, 9) and by injecting the precursor or resin in the side bar slot ('900, Fig. 3, 45).

It would be obvious to one of ordinary skill in the art at the time the invention was made to insert the hard spring first to tight the bar to the slot then to inject the precursor or resin to the side bar slot.

**As applied to claim 15,** the '900 teaches the injection of the precursor or resin (Fig. 3, 45) via an open end of the slot (Fig. 3, 15).

**As applied to claim 16,** the '205 and '900 teach a process of making dynamoelectric machine by providing the lateral ripple spring ('205, Fig. 8, 9) with transverse or oblique troughs extending towards the open end of the slot, and injecting the precursor or resin ('900, Fig. 3, 45)

into a gap to contain the lateral ripple spring.

**As applied to claim 20,** the '205 and '900 teach a process of making dynamoelectric machine by inserting the spring in the side bar slot ('205, Fig. 8, 9) and by injecting the precursor or resin in the side bar slot ('900, Fig. 3, 45).

It would be obvious to one of ordinary skill in the art at the time the invention was made to inject sufficient precursor or resin in the side bar slot to fill the troughs of the installed lateral ripple spring, in order to save material and labor costs.

5. Claims 17-19, 21, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '205 in view the '900 and further view of Applicants Admitted Prior Art (AAPA).

**As applied to claim 17,** the '205 and '900 teach a process of making dynamoelectric machine, except for injecting the precursor or resin via the vent channels of the core.

The AAPA teaches the vent channel for gas cooling of the bar (Fig. 4, 32).

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the three teachings by applying the vent channel, as taught by the AAPA, as injection hole in order to facilitate the precursor or resin injection.

**As applied to claims 18, 19, 21, 22 and 24,** the '205, '900 and AAPA teach a process of making dynamoelectric machine by providing the lateral ripple spring ('205, Fig. 8, 9) with transverse or oblique troughs extending towards the open end of the slot, and injecting the precursor or resin ('900, Fig. 3, 45) into a gap to contain the lateral ripple spring.

It would be obvious to one of ordinary skill in the art at the time the invention was made to realize that the injection of the precursor or resin into a gap containing the lateral ripple spring will fill at least or sufficiently one side of the spring, its troughs and beyond the longitudinal end of the lateral ripple spring.

***Allowable Subject Matter***

6. Claims 23 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M - F, 9AM - 5PM.

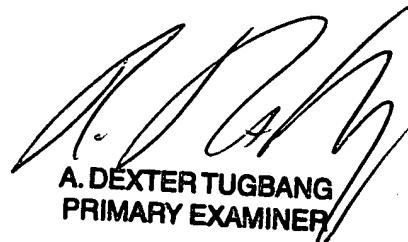
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tim Phan  
Examiner  
Art Unit 3729

tp  
May 5, 2005



A. DEXTER TUGBANG  
PRIMARY EXAMINER